

ABSTRACT

The invention provides an anode material for lithium ion secondary battery using a coated graphite powder as raw material, which is coated with a thermoplastic resin of a carbonization yield of ≤ 20 wt% in a proportion of ≤ 10 parts by weight the carbonized material per 100 parts by weight graphite powder. Coating with thermoplastic resin increases the accumulative pore volume by $\geq 5\%$, relative to the uncoated powder, and results in pore sizes of $0.012 - 40 \mu\text{m}$ measured via mercury porosimeter method. Calculated with the BJH method as viewed from desorption isotherm, the coated graphite powder has a mesopore volume ≤ 0.01 cc/g or $\leq 60\%$ of the pore volume of the uncoated graphite powder. This coated powder also has an average particle size ranging from $10 - 50 \mu\text{m}$ measured by a laser-scattering-particle-size-distribution measuring device, and a standard deviation to the average particle size (σ/D) ratio of ≤ 0.02 .